

Directive: LAPD 5300.1

Effective Date: October 6, 2004

Revalidated: August 17, 2005

Expiration Date: August 17, 2009

Responsible Office: Safety and Mission Assurance Office

SUBJECT: Program Assurance

1. SUMMARY

This directive sets forth policy, responsibilities, and authority for the Langley Research Center (LaRC) Program Assurance (PA) functions which include: systems safety; quality assurance; systems reliability; parts, materials, and processes; software assurance, and configuration control.

2. POLICY

This Center will plan and execute its activities to utilize practical and cost-effective measures to accomplish necessary high levels of program assurance commensurate with the research, aeronautics and space objectives.

3. **RESPONSIBILITIES (Official/Function)**

- a. General
- (1) The single point of responsibility and authority for PA activities within this Center rests with the Safety and Mission Assurance Office (SMAO).
- (2) LPR 5300.1 describes the PA practices which are necessary to accomplish this Center's Spaceflight Projects and Systems and is to be the basis for the development of product assurance plans. Appropriate sections can be selectively applied in consultation with Mission Assurance Branch for the effective execution of specific projects in a manner consistent with the above policy. Future LPR's will be issued to address specific PA practices for Aeronautics Programs and Projects, Models and related research.
- b. Director, SMAO
- (1) Provide guidance and direction for Centerwide PA activities.
- (2) Ensure that the actions taken are in accordance with NASA and LaRC policies and are properly coordinated.
- (3) Evaluate and report on the effectiveness of PA activities; make recommendations for improvements in these activities; and follow up on these recommendations.

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- (4) Serve as the Center's focal point for inquiries from business firms, industry associations, Government agencies, and universities concerning PA matters.
- c. Line Managers

Ensure proper application of PA requirements to activities under their supervision.

- d. Project Managers
- (1) Develop product assurance plans in concert with the Safety and Facility Assurance Branch, SMAO. Implement product assurance plans consistent with project objectives.
- (2) Coordinate PA activities with SMAO.
- (3) Ensure compliance with Centerwide policies and practices.
- 4. ORGANIZATIONAL FUNCTIONS (Organization/Functions)
- a. Mission Assurance Branch, SMAO
- (1) Plan, direct, and execute a comprehensive program to provide the PA required for this Center's programs.
- (2) Define and implement Centerwide aeronautics and space PA policy and procedures.
- (3) Plan, direct, and coordinate the application of PA methodology and analytical techniques.
- (4) Represent the Center on PA matters at conferences, symposia, and meetings sponsored by industry, Government, universities, and professional and technical societies.
- (5) Prepare and implement product assurance plans; system reliability analysis; internal and external audits, surveys, and assessments.
- (6) Provide assurance personnel for Center-related committees, panels, boards, surveys, and teams.
- b. Safety and Facility Assurance Branch, SMAO
- (1) Define and implement facility PA policy and procedures.

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- (2) Implement facility systems safety analysis and configuration management requirements for LaRC research facilities.
- c. Research and Engineering Organizations

Perform responsibilities in accordance with product assurance plans, and PA policies and directives.

5. REFERENCES

- a. NPD 2820.1, "NASA Software Policies."
- b. NPR 8735.2, "Management of Government Safety and Mission Assurance Surveillance Functions for NASA Contracts."
- c. LPR 1710.15, "Wind-Tunnel Model Systems Criteria."
- d. LPR 1740.4, "Facility System Safety Analysis and Configuration Management."
- e. LPR 5300.1, "Space Product Assurance."

6. RECISION

LAPD 5300.1, dated July 22, 2004.

original signed on file

Wallace C. Sawyer Deputy Director